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## BEHAVIORAL ABSTRACTIONS FOR DEBUGGING COORDINATION-CENTRIC SOFTWARE DESIGNS

### Abstract of the Disclosure

A behavioral abstraction is, in an abstract sense, a generalization of an event  
10 cluster. Behavioral abstraction is a technique where a predetermined behavioral  
sequence is automatically recognized by the simulator in a concurrent stream of  
system events. A behavioral sequence is at its most basic level a partial order of  
events. However, the events considered in a behavioral sequence are subject to  
configuration-based filtering and clustering. This allows a designer to create a model  
15 for a particular behavior and then set up a tool to find instances of the particular  
behavior in an execution trace. Behavior models are representations of partially  
ordered event sequences and can include events from several components.